

What is claimed is:

1 1. A method for producing a torsion spring as
2 part of a micromechanical torsion spring/mass systems,
3 which can be obtained from two wafers or two wafer
4 composites, and has a low torsional stiffness compared to
5 the transverse stiffness in the lateral and vertical
6 directions, characterized in that
7 - a spring (3) which extends over the entire wafer or
8 wafer composited thickness and has a V-shaped cross
9 section which is laterally delimited by [111] surfaces, is
10 produced on at least one side edge region of each wafer or
11 wafer composite by anisotropic wet-chemical etching, and
12 - the two wafers or wafer composites which have been
13 prestructured in this way are rotated through 180° and are
14 bonded to one another oriented in a mirror-symmetrical
15 fashion with respect to one another, so that overall an X-
16 shaped torsion spring cross section is formed in the
17 region of the two V-shaped spring cross sections.

1 2. The method as claimed in claim 1,
2 characterized in that, on at least one wafer or wafer
3 composite, an insulating layer (4) is formed on the
4 surface which faces the other wafer or wafer composite
5 during bonding.

1 3. The method as claimed in claim 2,
2 characterized in that the two wafers or wafer composites
3 are joined to one another by silicon direct bonding.